

What is claimed is:

1. A system for tracking and managing mobile devices in a wireless network, comprising:

a plurality of device agents, each device agent being  
5 assigned to collect association information from a corresponding set of access points in the wireless network; and

a device manager adapted to receive the collected association information from the device agents, the device  
10 manager having a conflict resolution engine for resolving conflicting access point associations,

wherein the association information from an access point includes information identifying mobile units which are associated with the access point.

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2. The system of claim 1, wherein the association information from the access point also includes address information of the mobile units which are associated with the access point, and the conflict resolution engine uses  
20 the address information to resolve conflicting access point associations to a mobile unit.

3. The system of claim 1, wherein the association information from the access point includes time stamps  
25 associated with the association information, and the conflict resolution engine uses the time stamps to resolve

conflicting access point associations to a mobile unit.

4. The system of claim 1, wherein the conflict resolution engine resolves a conflict between the  
5 associations of a mobile unit to two or more access points.

5. The system of claim 1, wherein the conflict resolution engine requests appropriate ones of the device agents to query access points corresponding to the  
10 conflicting associations.

6. The system of claim 1, wherein the conflict resolution engine uses network traffic statistics for a mobile device to resolve whether the device is associated  
15 with an access point.

7. The system of claim 1, wherein the conflict resolution engine is rule-based.

20 8. The system of claim 1, wherein the device agents obtain the association information by querying the access points.

9. The system of claim 8, wherein the device manager  
25 sends a request to a device agent to trigger the query process of the device agent.

10. The system of claim 1, further comprising a topology service adapted to provide a visualization of current associations between the access points and the mobile units, through a graphical user interface.

11. The system of claim 10, wherein the visualization is associated with a subnet.

12. The system of claim 1, wherein the association information includes identification of disassociated mobile units.

13. The system of claim 1, wherein the association information includes information describing disassociation of a mobile unit from an access point.

14. A method for tracking and managing mobile devices in a wireless network, comprising:

collecting association information from a plurality of access points in the wireless network, the association information from an access point including information identifying mobile units which are associated with the access point; and

resolving conflicting access point associations through a conflict resolution engine.

15. The method of claim 14, further comprising using network traffic statistics for a mobile device to resolve whether the device is associated with an access point.

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16. A computer system comprising a processor and a program storage device readable by the computer system, tangibly embodying a program of instructions executable by the processor to perform the method claimed in claim 14.

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17. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform the method claimed in claim 14.

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18. A computer data signal transmitted in one or more segments in a transmission medium which embodies instructions executable by a computer to perform the method claimed in claim 14.

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19. A method for tracking and managing mobile devices in a wireless network, comprising:

discovering wireless devices connected to the wireless network;

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collecting association information from access points, the association information from an access point including information identifying a current association between the

access point and an associated wireless device; and

providing a visualization of current associations between the access points and corresponding associated wireless devices.

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20. The method of claim 19, further comprising tracking a mobile wireless device connected to the wireless network by using the collected association information.

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21. The method of claim 19, further comprising:  
generating mobility information by consolidating the collected association information and resolving any conflicts in the collected information; and  
logging the resolved mobility information.

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22. The method of claim 19, further comprising detecting unauthorized rogue devices connected to the wireless network.

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23. The method of claim 19, further comprising detecting unauthorized access points.

24. The method of claim 19, further comprising detecting disassociated mobile units.

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25. A system comprising a processor and a program

storage device readable by the computer system, tangibly embodying a program of instructions executable by the processor to perform the method claimed in claim 19.

5        26. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform the method claimed in claim 19.

27. A computer data signal transmitted in one or more  
10 segments in a transmission medium which embodies instructions executable by a computer to perform the method claimed in claim 19.

28. A system for tracking and managing mobile devices  
15 in a wireless network, comprising:

a plurality of device agents, each device agent being assigned to collect association information from a corresponding set of access points in the wireless network;

a device manager adapted to receive the collected  
20 association information from the plurality of device agents, the association information from an access point including information identifying a current association between the access point and an associated wireless device;  
and

25 a topology service adapted to provide a visualization of access points and corresponding associated wireless

devices.

29. The system of claim 28, wherein the device manager assigns the access points to the plurality of  
5 device agents to balance a workload across the device agents.

30. The system of claim 28, wherein the device agent regularly polls the corresponding set of access points to  
10 determine changes to associations of the access points.

31. The system of claim 28, wherein the device agent queries the corresponding set of access points to request association information from the access points.

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32. The system of claim 28, wherein the device manager consolidates the collected information and resolves any conflicts in the collected information.

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33. The system of claim 28, wherein the association information from the access point is retrieved from an association table maintained by the access point.